

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

NOTICE OF ADJUSTMENT OF THE RATES OF KENTUCKY-AMERICAN WATER COMPANY)	CASE NO. 91-361
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O R D E R

IT IS ORDERED that Kentucky-American Water Company ("Kentucky-American") shall file the original and 12 copies of the following information with the Commission by January 24, 1992 with a copy to all parties of record. Each copy of the data requested should be placed in a bound volume with each item tabbed. When a number of sheets are required for an item, each sheet should be appropriately indexed, for example, Item 1(a), Sheet 2 of 6. Include with each response the name of the witness who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure that it is legible. Where information requested herein has been provided along with the original application, in the format requested herein, reference may be made to the specific location of said information in responding to this information request. When applicable, the information requested herein should be provided for total company operations and jurisdictional operations, separately.

1. Referring to page 3 of Dwight Work's testimony, explain why it is appropriate to use a single factor to allocate corporate

and service company expenses. Would it not be more appropriate to divide total corporate and service company expenses into the separate classifications or functions listed in response to Item 51 of the Commission's Order of November 15, 1991 and then to formulate individual allocation factors for each expense classification?

2. Provide a complete breakdown of the expenses shown in column 4 of Schedules 1-3 of Exhibit DSW-1 using the same expense classifications as used in response to Item 51 of the Commission's Order of November 15, 1991.

3. Explain why only ten years of data was used in the regression analyses shown in Mr. Work's testimony.

4. Referring to page 7 of Mr. Work's testimony, provide a theoretical basis for the following statements: "Generally, any value of the Durbin-Watson statistic less than 1.5 leads to the suspicion that positive autocorrelation exists and that the computed coefficient of determination is too high. Conversely, any value of the Durbin-Watson statistic greater than 2.5 leads to the suspicion that negative autocorrelation may exist and that the computed coefficient of determination may be too low." Specifically, explain how the critical statistics 1.5 and 2.5 were determined.

5. Explain why a Durbin-Watson table, which gives upper and lower critical bounds for various levels of significance depending on the sample size and number of independent variables in the regression equation, was not used in evaluating the significance

of the Durbin-Watson statistics calculated for the regression equations discussed on pages 5-10 of Mr. Work's testimony.

6. Provide all data and final results for the regression equations using net utility plant in service, water sales, and employees as independent variables as discussed on pages 9-10 of Mr. Work's testimony.

7. Explain why separate regression equations were formulated and analyzed at the service company, Southern Region, and distribution company levels

8. Explain possible reasons for the wide range of coefficients of determination values for the service company, Southern Region, and distribution company levels in the regression equations discussed on pages 9-10 of Mr. Work's testimony.

9. For each separate expense classification listed in Item 51 of the Commission's Order of November 15, 1991, perform a regression analysis on key variables in order to develop a separate allocator for each classification. Provide all workpapers, calculations, and assumptions used in each analysis.

10. Provide the following data for the American Waterworks system, the Southern Region, and Kentucky-American, for the period 1981 through 1990:

- a. Number of bills.
- b. Number of employees.
- c. Water produced in gallons.
- d. Water purchased in gallons.
- e. Plant in service.
- f. Number of bills.

11. Did the American-Waterworks Service Company ("Service Company") seek the input of each department when it developed the

allocation method used in the 1989 Service Company Agreements? If the answer is no, provide a narrative to explain the reason.

12. Did the Service Company consider using its direct billed charges as the basis of allocating the shared or common expenses?

13. In its December 1991 Management Audit Action Plan Progress Report, Recommendation IX-R17, Review the appropriateness and fairness of the 1989 change in billing methodologies on the charges to Kentucky-American from AWWSCo., Kentucky-American stated that, "It is the opinion of management that this cannot be intelligently addressed until it is clear how the Service Company will be structured in the future." Given this response, explain why Kentucky-American has used its 1989 Service Agreement in this proceeding.

14. a. On page 17 of his direct testimony, Cecil Sasher states that 85 percent of the Service Company customer billing expenses are fixed and that the remaining 15 percent are dependent on the number of bills. Provide an analysis to show that the fixed customer billing charges are dependent on the number of customers. Include all workpapers, calculations, and assumptions used in Kentucky-American's analysis.

b. Provide a schedule detailing customer billing expenses directly related to the number of bills.

c. Provide a schedule detailing customer billing expenses that are fixed.

15. a. Provide a detailed analysis of the direct Service Company billed charges that Kentucky-American expensed during the test period. The analysis should be in the same form as

Kentucky-American's response to Item 51 of the Commission's Order of November 15, 1991.

b. Provide a detailed analysis of the direct Service Company billed charges that Kentucky-American capitalized and/or amortized during the test period. The analysis should be in the same form as Kentucky-American's response to Item 51 of the Commission's Order of November 15, 1991.

16. Refer to Kentucky-American's responses to Item 50 of the Commission's Order of November 15, 1991. The sum of the regional and general office under the 1989 Service Company Agreement ("1989 Agreement") does not equal the sums of the regional and general offices under the 1971 Service Company Agreement ("1971 Service Company"). Provide a detailed explanation as to why the office totals are not equal.

17. a. Kentucky-American's response to Item 50 of the Commission's Order of November 15, 1991 shows that Kentucky-American was allocated \$1,139,205 of Service Company charges when the 1989 Agreement was used; however, Kentucky-American's response to Item 51 of that same Order shows that Kentucky-American was allocated \$1,805,251. Reconcile the differences between the two responses and provide a detailed reason for why they should differ.

b. Kentucky-American's response to Item 50 of the Commission's Order of November 15, 1991 shows that the Service Company charges allocated under the 1971 Agreement to Kentucky-American would have been \$780,068; however, Kentucky-American's response to Item 51 of that Order shows that this allocated amount

would have been \$1,722,235. Reconcile the differences between the two responses and provide a detailed reason for why they should differ.

18. a. With reference to page 12 of Robert Edens' Direct Testimony relating to the reasonableness of the \$436,587 of materials and supplies set forth in Exhibit No. 3, Schedule 4, explain what impact implementation of the new RAMPS system and implementation of related management audit recommendations will have on the level of materials and supplies.

b. Has Kentucky-American established any goals for the reduction of its inventory?

19. With reference to Edward Grubb's testimony regarding the billing lag of 5.87 days; the collection lag of 20.91 days; and the revenue lag of 58.20 days, what improvements are expected to occur with the implementation of recommendation VIII-R6 from the recent management audit?

20. According to page 20 of Mr. Grubb's direct testimony, the billing lag and collection lag were based on a 6-month analysis. Explain why Kentucky-American relied on a 6-month analysis rather than a full year. Project whether the information contained in a twelve month billing period would significantly effect either the billing or collection lag. Provide all workpapers, calculations, and assumptions used in the projection.

21. a. On page 21 of his direct testimony, Mr. Grubb states that a separate calculation of lead/lag days was computed for each major expense category. Explain why Kentucky-American

did not review 100 percent of its expenses in preparing its lead/lag study.

b. What criteria was used to determine which expenses would be used in the lead/lag analysis?

22. Provide a detailed comparison of the lead/lag study presented in this proceeding with the lead/lag study Kentucky-American filed in Case No. 10069.¹

23. Exhibit No. 3, Schedule 3, page 1 of 3, shows that Kentucky-American's lead/lag study arrived at cash working capital requirement of \$1,893,000 which when combined with Kentucky-American's requested rate of return results in a revenue increase of approximately \$328,109. A 1/8 cash working capital requirement and Kentucky-American's pro forma operation and maintenance expense would result in a cash working capital of \$1,502,242 for a revenue increase of \$269,343. Given the difficulty of preparing a lead/lag study, the expenses involved, the controversy of including non-cash items in the study, and the minimal impact the study has on Kentucky-American's overall revenue requirement, explain what advantages the lead/lag study has over the 1/8 formula approach.

24. a. On page 15 of his direct testimony, Mr. Edens states that, "approval of the proposed step-tariff will help postpone a future rate case." Roy Ferrell states on page 4 of his

¹ Case No. 10069, Notice of Adjustment of the Rates of Kentucky-American, Order dated June 3, 1988.

direct testimony that, "the use of a step rate will push back the time frame for a future rate filing." If the Commission were to approve Kentucky-American's proposed step increase, when would Kentucky-American plan to file its next rate case?

b. If the step increase is not granted, when would Kentucky-American file its next rate case?

25. On page 15 of his direct testimony, Mr. Edens states that Kentucky-American's construction budget for 1992 is \$13,000,000. Given the level of the 1992 construction budget and Kentucky-American's most recent history of filing a rate case every year, explain why it would not be likely for Kentucky-American to file for rate relief at the close of 1992.

26. a. When did Kentucky-American originally plan to begin construction on the Jacks Creek Pipeline?

b. What effect have the delays occurring in Case No. 91-359² had on the construction schedule for the Jacks Creek Pipeline?

27. a. Kentucky-American's proposed step increase is based on the projected construction costs of the Jacks Creek Pipeline. If the actual construction costs differ from Kentucky-American's projections, what effect would this have on the proposed step increase?

² Case No. 91-359, The Application of Kentucky-American Water Company For a Certificate of Public Convenience and Necessity Authorizing the Construction of Approximately 49,000 Feet of 12" Main, 240 Feet of 8" Main, With Associated Valves and Fittings, Known as The "Jacks Creek Pipeline."

b. What procedures does Kentucky-American have in place or plan to have in place to ensure that it does not over or under earn on its investment?

28. On page 14 of his direct testimony, Mr. Grubb comments that Kentucky-American has made numerous adjustments to match revenues, expenses, rate base, and capital items as a result of the recognition of post test-period plant additions. Refer to any revenue adjustments Kentucky-American proposed in this proceeding that are directly related to its post test-period plant additions.

29. On page 18 of his direct testimony, Mr. Edens makes the following statement, "all construction expenditures were absolutely necessary for the company to meet existing and projected customer demands." Provide an estimate of the projected customer demand in gallons and revenues that will be met due to Kentucky-American's post test-period plant additions. Include all workpapers, calculations, and assumptions used in the estimates.

30. Mr. Grubb states on page 14 of his direct testimony that, "Neither the intake improvements nor the residuals management project will increase or decrease revenues." If the post test-period plant additions allow Kentucky-American to meet future customer demand thereby increasing revenues, explain why Kentucky-American failed to make the appropriate revenue and expense adjustments.

31. Provide a detailed definition of the residuals management and process optimization project that is included in Kentucky-American's post test-period plant additions.

32. a. Explain why Kentucky-American failed to adjust deferred state and federal income tax to reflect the post test-period plant additions.

b. Provide an estimate of what effect Kentucky-American's post test-period plant additions will have on accumulated deferred taxes and deferred income tax expense. Provide all workpapers, calculations, and assumptions used in the estimate.

33. On page 32 of his direct testimony, Mr. Grubb explains that 12 pumps at the Kentucky River Station will be replaced with 6 new pumps that are larger but are equipped with energy efficient motors. Kentucky-American estimated that this replacement will result in a reduction of 15 percent in fuel consumption. Provide a detailed explanation of the basis for Kentucky-American's estimated fuel saving.

34. a. Provide a monthly breakdown of the test-period maintenance expenses incurred to repair the Utility Plant In Service that Kentucky-American has proposed to retire in this proceeding.

b. Explain why Kentucky-American failed to estimate any savings that will occur in maintenance expense as the result of the proposed plant replacement.

35. If Kentucky-American is allowed to include post test-period plant additions in this proceeding, estimate what effect this will have on its decision of when to file its next rate case.

36. a. On page 15 of his direct testimony, Mr. Grubb states that the accruing of AFUDC will cease when the post test-period plant additions are complete and in service. In Case No. 10481,³ Kentucky-American did not accrue AFUDC on its post test-period plant addition (20 inch raw water main). Provide an explanation as to why Kentucky-American has accrued AFUDC on its current post test-period plant addition.

b. Provide a schedule detailing the AFUDC that Kentucky-American has accrued on its post test-period plant addition. Include all workpapers, calculations, and assumptions used in preparing the schedule.

37. On page 18 of his direct testimony, Mr. Edens states that an additional production operator at the Richmond Road Station is required to eliminate the need to work 25 hours of overtime per week, which would result in annual overtime of 1,300 hours. However, on workpaper C-15, Kentucky-American has estimated that if the new production operator is hired, then 450 hours of annual overtime will be eliminated. Provide a detailed explanation as to the reasons for the discrepancy between the two numbers.

38. Is Kentucky-American aware of any instance where the Commission has allowed adjustments to reflect post test-period employee levels?

³ Case No. 10481, Notice of Adjustment of the Rates of Kentucky-American Effective on February 2, 1989, Order dated August 22, 1989.

39. a. If wages are adjusted to reflect post test-period employee levels, explain why revenues should not be adjusted to reflect any increase that will occur in customers or consumption.

b. Provide Kentucky-American's monthly projection of customers and revenues for the 12-month period following the test period. Include all workpapers, calculations, and assumptions supporting Kentucky-American's projections.

40. Refer to pages 16 through 18 of Mr. Edens' direct testimony:

a. Explain why Kentucky-American has a backlog of 6,558 meter boxes which are in need of repair.

b. Based on the statement of page 17 it appears that the new accountant will be involved in property tax, state sales tax, and use tax. Will the hiring of the new accountant eliminate the need for Kentucky-American to hire outside consultants in these areas? Provide the amount expended in the test period for outside consultants to assist in these areas.

c. What additional services will Kentucky-American gain from hiring an additional data processing customer service supervisor?

d. Kentucky-American has proposed to increase its payroll by \$155,825 and reduce overtime wage expense by \$12,430 to reflect the hiring of 6 additional employees. Given the current economic conditions and layoffs occurring in other industries why is it reasonable for Kentucky-American to increase its employee level and payroll?

e. For each proposed additional employee, provide the following:

1. the date hired;
2. the first full work day;
3. the number of people interviewed;
4. if the employee came from the Kentucky-American system; and
5. the actual annual salary.

41. Refer to Kentucky-American's workpapers C-2-10 through C-2-19:

a. What process does Kentucky-American follow in approving and setting the wage increases of its non-union employees?

b. The wage increase granted to the non-union employees range from 3 to 8 percent. Explain the criteria Kentucky-American used in setting the percentage increases and how each employee is evaluated in the process.

c. Given the current economic trends, explain why it would not be more appropriate to use a 5 percent across-the-board increase than the ranges used in Kentucky-American's adjustment.

d. Recalculate test-period non-union wages and the associated payroll expenses to reflect an across-the-board pay increase of 5 percent. In the calculation exclude those employees whose salary increase was due to promotions. Include all workpapers, calculations, and assumptions used in Kentucky-American's recalculation.

42. On page 7 of his direct testimony, Mr. Grubb discusses the roof repair of Kentucky-American's office that will cost an estimated \$51,753. Provide the date the roof repairs were finished and the actual cost incurred.

43. Refer to page 8 of Mr. Grubb's direct testimony, where the painting of the fire hydrants is discussed:

a. Why does Kentucky-American have 5,300 fire hydrants in need of painting?

b. Does Kentucky-American have in place a maintenance program that would periodically involve painting of the system fire hydrants?

c. Explain why Kentucky-American did not paint 1/5 of its fire hydrants each year and include this amount as an expense.

d. Why should the cost to paint meters and carrying cost of the unamortized cost be recovered from the ratepayers?

44. Kentucky-American has proposed to recover the cost of evaluating a radio telemetry system over a 3-year period and has included the unamortized amount in rate base. In the past, the Commission has allowed the recovery of amortization for abandoned investigation but has not given rate base treatment of the unamortized amount. Provide an explanation as to why the Commission should now allow Kentucky-American to recover these unamortized costs in its rate base.

45. On page 29 of his direct testimony, Mr. Grubb states that the cleaning of the lagoons at the Kentucky River Station will be completed at the end of 1990. Provide the date the lagoon

cleaning was completed and the actual cost incurred in cleaning the lagoon.

46. a. Recalculate the cost-of-serving-new-customers adjustment with the direct Service Company charges excluded from the calculation. Provide all workpapers, calculations, and assumptions used in the recalculation.

b. Since the direct Service Company billings have no apparent relationship to the number of customers served, why should these costs be included in the adjustment?

47. Refer to workpaper C-16-1 and page 32 of Mr. Grubb's direct testimony:

a. Provide the date the maintenance programs will or have been started.

b. Are the reported costs based on estimates or actual operations? Provide all workpapers, calculations, and assumptions to support the costs.

c. On workpaper C-16-3 it is estimated that all dead-end mains will be flushed in 2 years. Will Kentucky-American continue to flush these mains every 2 years or over a longer period?

48. Provide the results of Kentucky-American's safety audit and, when available, the actions Kentucky-American will take as a result of the audit.

49. Provide the dates the customer survey will be started and completed.

50. Refer to workpaper C-23-1, entitled Temporary Customer Service Clerks:

a. What is the basis for the hourly rate of \$9?

b. When will Kentucky-American begin its use of the temporary customer service clerks?

51. On page 35 of his direct testimony, Mr. Grubb states that Kentucky-American experienced approximately 13,000 abandoned customer calls during the test period. What effect did the abandoned customer calls have on Kentucky-American? Does it justify the increased cost to the customers?

52. Refer to Kentucky-American's response to Item 7(b) of the Commission's Order of November 15, 1991:

a. Provide an explanation of why there is no fire service revenue reported for July of the test period.

b. This schedule shows annual water revenues of \$23,827,705, while Exhibit No. 4, Schedule 2, page 1 of 2, reports "Per Books" water revenue of \$25,164,367. Reconcile by category the differences between these two schedules. Provide all workpapers, calculations, and assumptions used in the reconciliation.

53. Refer to Kentucky-American's response to Item 10 of the Commission's Order of November 15, 1991. Provide an explanation of the fluctuation that occurred in these accounts during the test period:

- a. Cash.
- b. Working Funds.
- c. Prepayments.
- d. Accounts Payable Associated Companies.
- e. Miscellaneous Current and Accrued Liabilities.

54. In that same response to Item 10, Kentucky-American showed balances in the accounts receivable from associated

companies account for September through November 1990. Provide an explanation of what happened in this account.

55. Refer to Kentucky-American's response to Item 12 of the Commission's Order of November 15, 1991. Provide an explanation as to why the only balance shown for Account No. 154.2 - Auto Supplies was in September of the test period.

56. Refer to Kentucky-American's response to Item 20(a) of the Commission's Order of November 15, 1991. Provide the reason why the following accounts increased during the test period over the previous 12-month period:

- a. Account 6262 Miscellaneous Pumping Labor Electric.
- b. Account 6411 General Chemicals.
- c. Account 6431 Miscellaneous Water Expenses - Current.
- d. Account 6432 Miscellaneous Water Labor.
- e. Account 901 Customer Accounts Supervision.
- f. Account 90351 Billing and Accounting Computer.
- g. Account 9052 Miscellaneous Customer Accounting Salaries.
- h. Account 9233 Legal Services.
- i. Account 9235 Other Services - Current.

57. What effect does the proposed step increase have on Kentucky-American's cost of capital?

58. Refer to Mr. Sasher's testimony, page 7. Explain the derivation of the 67.06 percent used to calculate the substituted portion of the financing scheduled for closing in January 1992.

59. Paul Moul's testimony, page 25, states that later data should be added so that a complete 12-month average dividend yield is available by completion of this case. When will you provide this data?

60. Refer to the Commission's Order of November 15, 1991, Item 7(b) and the rate case working papers. Explain the apparent

discrepancy in the number of customers for August and September of 1991.

61. Refer to the agreement between the city of North Middletown and Kentucky-American stamped effective by the Commission, June 16, 1991. Have any pro forma adjustments been made for sales to the city of North Middletown.

62. Explain how there were more water sales for the month of September 1991 than water delivered in the system.

63. Refer to Exhibit 4, Schedule 2, Page 1 of 2 explain:

a. On line 17, what water sales are contained under "Miscellaneous?"

b. On line 41, what operating revenues are contained under "Miscellaneous?"

64. Have any pro forma adjustments been made for increased sales to Toyota Motor Corporation that would have occurred during the test year?

65. Furnish Cost-of-Service Studies for the 10 inch and 16 inch connections for municipal or private fire protection not currently in your tariff filed with the Commission as required by 807 KAR 5:011, Section 6(c).

66. Refer to Exhibit 4, Schedule 2, page 2 of 2. Explain and show the breakdown of adjustments made to industrial and other public authorities.

Done at Frankfort, Kentucky, this 10th day of January, 1992.

PUBLIC SERVICE COMMISSION


For the Commission

ATTEST:


Executive Director